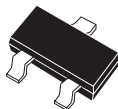


**CMPD5001
CMPD5001S****HIGH CURRENT
INDUCTIVE LOAD
SWITCHING DIODE****SOT-23 CASE**

The following configurations are available:

CMPD5001	SINGLE
CMPD5001S	DUAL, IN SERIES

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD5001 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for switching inductive load applications requiring extremely high current capability.

MARKING CODE: DA2**MARKING CODE: D49****MAXIMUM RATINGS** ($T_A=25^{\circ}\text{C}$)

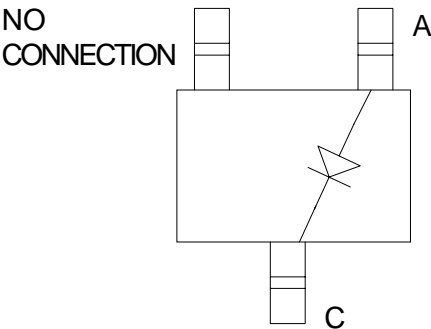
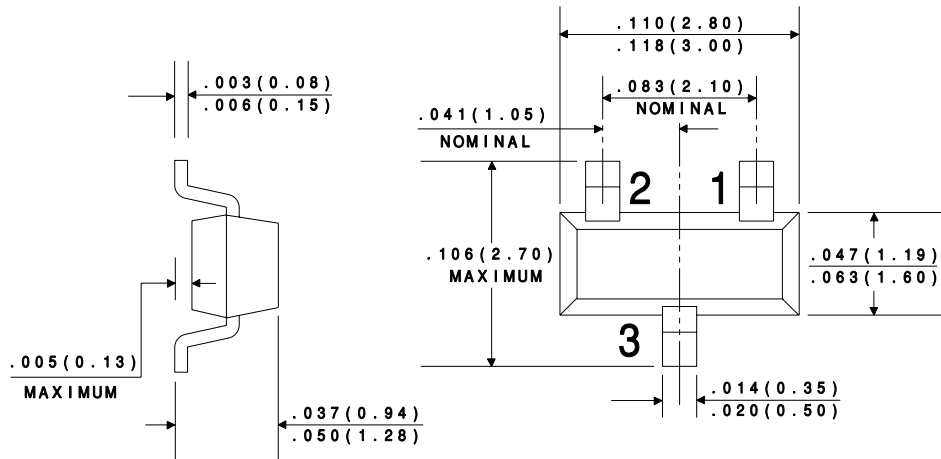
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	120	V
Continuous Forward Current	I_F	400	mA
Peak Repetitive Forward Current	I_{FRM}	800	mA
Peak Repetitive Reverse Current	I_{RRM}	600	mA
Forward Surge Current, $t_p=1\ \mu\text{s}$	I_{FSM}	6000	mA
Forward Surge Current, $t_p=1\ \text{s}$	I_{FSM}	1500	mA
Power Dissipation	P_D	350	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	Θ_{JA}	357	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

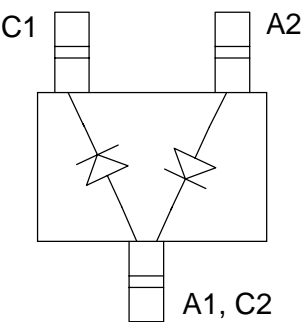
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
B_{VR}	$I_R=1.0\text{mA}$	120	175	V
I_R	$V_R=90\text{V}$		100	nA
I_R	$V_R=90\text{V}, T_A=150^{\circ}\text{C}$		100	μA
V_F	$I_F=10\text{mA}$		0.75	V
V_F	$I_F=50\text{mA}$		0.84	V
V_F	$I_F=100\text{mA}$		0.90	V
V_F	$I_F=200\text{mA}$		1.00	V

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
V_F	$I_F=400\text{mA}$		1.25	V
C_T	$V_R=0$, $f=1\text{ MHz}$		35	pF
t_{rr}	$I_F=I_R=30\text{mA}$, RECOV. TO 1.0mA , $R_L=100\Omega$		60	ns
t_{rr}	$I_F=I_R=10\text{mA}$, RECOV. TO 1.0mA , $R_L=100\Omega$		50	ns

All dimensions in inches (mm).



CMPD5001



CMPD5001S